BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF HAWAII

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate the Implementation Of Feed–in Tariffs.	DOCKET NO. 2008-0273

BLUE PLANET FOUNDATION'S COMMENTS ON HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC., AND MAUI ELECTRIC COMPANY, LIMITED'S PROPOSED CONCEPTUAL FRAMEWORK FOR RELIABLITY STANDARDS WORKING GROUP FILED FEBRUARY 26, 2010

AND

CERTIFICATE OF SERVICE

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Blue Planet Foundation ("Blue Planet"), by and through its attorneys Schlack Ito Lockwood Piper & Elkind, and pursuant to the Commission's March 11, 2010 Order Granting Extension Request in the above-captioned matter, hereby submits its comments ("Comments") on the Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited's ("MECO") (collectively, "HECO Companies") proposed Reliability Standards Working Group ("Working Group") as follows.

I. INTRODUCTION

But for the recent Working Group proposal, Hawaii's landmark Feed-in Tariff ("FIT") docket, begun almost a year and a half ago, appears to be drawing to a close. The Commission initiated the investigation into a Hawaii FIT by order filed October 24, 2008. Approximately twenty-two parties have participated in the proceeding since inception. The Commission conducted a five-day panel hearing in April 2009 that garnered national media attention. Based upon the record, which now consists of well over three hundred filed submissions, the Commission issued its seminal 101-page Decision and Order on September 25,

2009. The Decision and Order established a FIT for Hawaii – the second such FIT in the United States.

Since that time, the Commission and parties have worked diligently to develop the tariffs necessary to implement the FIT. The tariff for Tiers 1 and 2 of the FIT is pending Commission approval, and the Tier 3 tariff is expected to be completed for Commission review and approval on May 13, 2010 – less than six weeks from now. The parties are making similar progress on resolving queuing and interconnection issues. All parties, including the HECO Companies, appear to be in agreement that the FIT should be fully implemented on the HECO system as soon as possible.

The only remaining substantive issue appears to involve the HELCO and MECO systems. The Commission must decide whether to limit the amount of renewable energy added to the HELCO and MECO systems under the FIT. Specifically, the Commission must determine whether limits in addition to the limit established by its Decision and Order (5% of 2008 system peak demand) are necessary. If so, the Commission must decide the nature and amount of the limit. Blue Planet has proposed that if the Commission believes limits for these two systems are necessary, it should limit additions to Tiers 1 and 2 projects equivalent to 2.5% of the 2008 system peak demand for the first year of the FIT. The Commission may favor other approaches to resolving this issue. Regardless, Blue Planet submits that the Commission can reach a decision on phased implementation of the FIT, for the important but relatively small HELCO and MECO systems, in the current proceeding.

Despite the discrete nature of a Commission decision on phased implementation of the FIT for HELCO and MECO, the HECO Companies have proposed to dramatically expand the scope of this docket and extend it for another full year. The HECO Companies propose

establishing a "Working Group" and "Technical Support Group" to examine "reliability standards" and "commercial business concerns." The Working Group is to commence in April 2010 and is proposed to conclude in June 2011.

Because the HELCO/MECO phased implementation decision can be made in the present proceeding, Blue Planet does not favor the HECO Companies' proposed Working Group. Blue Planet submits that, if necessary, the Commission can direct the parties to supplement the record in a targeted manner that does not unduly delay implementation of the FIT on the HELCO and MECO systems. In short, there is no need to extend the proceeding by a full year simply to make the phased implementation decision. Blue Planet also has specific concerns about the scope and procedures for the proposed Working Group.

At the same time, Blue Planet recognizes and appreciates that the capacity of the HECO Companies' electric systems to accept generation from variable energy resources is a central question in efforts to promote renewable energy in Hawaii. Blue Planet submits that the Commission will not receive a satisfactory answer to this question unless and until the Commission approves formal reliability standards, and those standards are used to determine the capacity of the HECO Companies' systems to accept variable energy resources.

Because the HECO Companies' proposed Working Group is unlikely to satisfactorily accomplish either objective, Blue Planet favors an independent proceeding (i.e., a new docket) to develop formal reliability standards and use them to determine grid capacity in approximately the same amount of time proposed for the Working Group. An independent proceeding is necessary to ensure that formal reliability standards are developed in a stakeholder-driven process conducted by an independent entity, to avoid excluding interested parties that may make important substantive contributions to the standards and capacity determinations, and to

ensure the FIT is not delayed on the HELCO and MECO systems. An independent proceeding will provide a sound basis not only for developing formal reliability standards, but also for using such standards to objectively and accurately determine the capacity of the HECO Companies' systems to accept variable energy resources now and in the decades to come as Hawaii transitions to a clean energy economy.

II. UPON APPROVAL OF THE TARIFFS, THE COMMISSION SHOULD DIRECT THE HECO COMPANIES TO IMPLEMENT THE FIT IMMEDIATELY AND WITHOUT FURTHER DELAY, SUBJECT TO POSSIBLE PHASED IMPLEMENTATION ON THE HELCO AND MECO SYSTEMS.

The Commission should direct HECO to implement the FIT immediately and without delay upon approval of the tariff for Tiers 1 and 2 and the tariff for Tier 3, and direct HELCO and MECO to implement the FIT either fully or in phases, as discussed below.[1] The D&O establishes three project size tiers, referred to as Tiers 1, 2 and 3, which apply to the three HECO Companies. D&O at 45. The October 29, 2009 Order Setting Schedule contains procedural steps for the development of a tariff for Tiers 1 and 2 and a tariff for Tier 3. *Id.* The D&O also establishes a limit on the amount of renewable energy that can be added to the HECO Companies' systems under the FIT program equal to 5% of the 2008 peak demand for each system ("D&O FIT cap"). D&O at 50.

A. HECO

Commission orders adopting the Tiers 1 and 2 Tariff and Tier 3 Tariff should direct HECO to implement the FIT for all three tiers immediately and without delay. A Commission order adopting the Tiers 1 and 2 Tariff may be forthcoming. The October 29, 2009 Order Setting Schedule identifies several procedural steps concerning the Tiers 1 and 2 Tariff. These steps have been completed. The D&O states that the Commission "encourages the parties

[1] This discussion assumes Commission-approved queuing and interconnection procedures for the FIT are established.

to focus on resolving issues in Tiers 1 and 2, to facilitate the immediate implementation of FITs in those tiers." D&O at 100 (emphasis added).

The Commission order adopting the Tiers 1 and 2 Tariff should direct HECO to implement the FIT immediately and without delay. The HECO Companies have concluded there is no basis for delaying implementation of the FIT on the HECO system. The HECO Companies' consultant, BEW Engineering, states in its February 8, 2010 report on the HECO system that "an initial DG [distributed generation] penetration level of 60 MW is deemed feasible, based on a high level steady state scenario analysis." HECO Companies' Report on Reliability Standards filed Feb. 8, 2010 ("HECO RS Report"), Attachment 1 to Exhibit 1 at 2. The HECO Companies affirm in their February 26, 2010 letter to the Commission that they "remain firmly committed to moving forward with implementation of the FIT program on Oahu as soon as possible, and will do so in accordance with a Commission decision and order in this docket." *Id.* at 3.

For the same reasons, the Commission should issue its order adopting a tariff for Tier 3 of the FIT upon completion of the procedural steps related to that tariff and direct HECO to implement the FIT immediately and without delay. The October 29, 2009 Order Setting Schedule identifies several procedural steps concerning the Tier 3 Tariff. The final step (other than a Commission decision) is to be completed May 13, 2010.

B. HELCO and MECO.

For the HELCO and MECO systems, Blue Planet urges the Commission to order HELCO and MECO either to fully implement the FIT immediately and without further delay or to implement the FIT in phases.

1. Full implementation.

If the Commission directs HELCO and MECO to fully implement the FIT immediately and without delay, the D&O FIT cap, and possible phased release of capacity (currently under discussion in this docket with regard to queuing and interconnection procedures), would serve to address any system reliability concerns the Commission considers valid.

2. Phased implementation.

In the event the Commission orders HELCO and MECO to implement the FIT in phases based on valid system reliability concerns, Blue Planet proposes two phases which should apply to each company.

a. Phase 1.

Phase 1 should commence as per Commission orders adopting the FIT tariffs. During Phase 1, FIT projects for each company should be limited to (i) project sizes established under Tiers 1 and 2 of the FIT, and (ii) nameplate capacity equal to 2.5% of the 2008 system peak demand.

b. Phase 2.

Phase 2 should commence upon the conclusion of the first twelve months of the FIT, or upon Commission approval of formal reliability standards and formal determinations of variable energy resources ("VERs")[2] capacity, whichever occurs first. During Phase 2, FIT projects for each company should be limited to the D&O FIT cap or the VERs capacity determination.

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[2] *See* Federal Energy Regulatory Comm'n., Integration of Variable Energy Resources (Docket No. RM10-11-000), Notice of Inquiry dated Jan. 21, 2010, 130 FERC ¶ 61,053 at 1, n. 1 ("the term variable energy resource (VER) refers to renewable energy resources that are characterized by variability in the fuel source that is beyond the control of the resource operator. This includes wind and solar generation facilities and certain hydroelectric resources.").

3. Reasons in support of full or phased implementation.

Blue Planet submits that both full and phased implementation of the FIT by HELCO and MECO are supported by a number of important considerations.[3] First, the HECO Companies are not calling for a "moratorium" on the interconnection of VERs at this time. In their February 26, 2010 letter to the Commission, the HECO Companies affirm their conclusion that for the HELCO and MECO systems "the high amount of intermittent renewables already in operation constrains the amount of intermittent renewable energy sources that can be added without causing noticeable impacts on grid reliability." *Id.* at 2. The HECO Companies also propose that the "timing of implementing the FIT" on the HELCO and MECO systems "should be subject to review by the proposed Working Group," that the Working Group should "evaluate" moving Net Energy Metering ("NEM") program caps to 4% of peak system load, and that for bi-lateral purchase power agreements on the HELCO and MECO systems no determinations on "performance requirements, curtailment, or contracting priority" will be made prior to the establishment of "reliability standards." Letter from D. Endo-Omoto (HECO) to Commission dated Feb. 26, 2010 ("February 26, 2010 Letter") at 3-4. Yet the HECO Companies also state in the same letter that "no moratoriums are being called for," that a moratorium may "at some point" be necessary, and that they will continue to interconnect renewable distributed generation on each of the islands. *Id.* at 2, 5.

Second, the HECO Companies admit that the conclusions of the HECO RS Report concerning potential limits on the interconnection of VERs are tentative insofar as they must be validated and confirmed. *See* HECO Companies' Response to Commission Letter of February 19, 2010, Attachment 1 at 2 ("To the extent that the existence of reliability and/or

[3] These reasons apply with equal force to a Commission decision regarding increasing the NEM limit to 4%.

curtailment challenges of integrating more variable renewables – including FIT resources – are validated . . . .") (emphasis added); *id.* (calling for review of reliability concerns "if confirmed").

Third, a relatively basic analysis, based on the addition of up to 2.5% of the 2008 system peak on the HELCO system, casts doubt on the HECO Companies' assertions that FIT projects may harm system frequency.[4] As explained in its response to HECO/Blue Planet-IR-10 filed March 1, 2010, Blue Planet has concluded that potential instantaneous system frequency fluctuations attributable only to FIT projects, added to the HELCO system in an amount up to 2.5% of the 2008 system peak demand, are expected to be within the bounds of normal system frequency control ranges for the HELCO system, as set forth in Table 8 of the HECO RS Report, "System Operating Criteria."

The analysis is based on certain assumptions. The analysis assumes the majority of FIT projects on the HELCO system would use solar photovoltaic ("PV") technology, the solar PV inverters for such projects would have expanded frequency and voltage ride-through capabilities, and that system disturbances would not be exacerbated by the potential "drop-out" of solar PV electrical output due to a decline in system frequency. It also assumes that meteorological conditions are not capable of producing a substantial instantaneous reduction in electrical output from all solar PV inverters installed across an entire island.

The analysis concludes that potential instantaneous frequency fluctuations from FIT projects are expected to be within the bounds of normal system frequency control ranges for the HELCO system. The addition of 5 MW to the HELCO system would create a maximum instantaneous frequency fluctuation of approximately ± 0.05 Herz ("Hz") (5 MW x 25% potential immediate electrical output drop-off due to cloud cover ÷ 2.5 MW/0.1Hz frequency

[4] Blue Planet anticipates providing further technical analyses in its Comments on the HECO RS Report due March 23, 2020.

bias = 0.05 Hz potential frequency fluctuation). The maximum potential frequency fluctuations due to solar PV projects would be expected to occur only during the limited hours of peak solar PV electrical output (i.e., 11:00 AM to 2:00 PM). Such a potential maximum frequency fluctuation would require a combined generator ramp rate of less than 2 MW per minute to mitigate potential frequency fluctuations. It is reasonable to assume that HELCO could use generator primary frequency response (generator governor droop response) and, if necessary, regulation reserves, to provide this response rate.

Fourth, any service interruptions experienced by HELCO and MECO customers due to FIT projects must be viewed in the context of service interruptions due to the companies' use of UFLS and offline quick-start generation rather than spinning reserves. HELCO customers *experience periodic, limited duration electric service interruptions due to fossil generator* equipment problems (unit trips) because Hawaii Island and Maui grids use under-frequency load shedding (UFLS) (limited customer interruptions) and quick starting off-line back-up generators, not on-line generators, to provide "spinning reserves" to mitigate system disturbances such as generator or transmission line trips. By contrast, Oahu relies upon on-line generation spinning reserves to provide uninterrupted continuity of electric service for all customers in the event that the largest on-line generator unit trips off-line.

Fifth, the HECO Companies' concerns appear to have more to do with excess energy and curtailment issues rather than system reliability. The HECO RS Report asserts that there is "minimal to no room" on the MECO and HELCO systems. *Id.*, Exhibit 1 at 4. The HECO Companies subsequently stated this conclusion "is due primarily to curtailment concerns although absent ability to appropriately curtail resources to maintain system balances, broader system reliability concerns must be addressed." *See* HECO Response to Blue Planet/HECO-IR-

10(b) (emphasis added). The HECO Companies further admit that the impact of potential FIT projects on curtailment is unclear. Studies concerning excess energy on the HELCO and MECO systems "do not include any planned distribution system level renewable energy projects nor do they include renewable energy from the addition of FIT Tiers 1 and 2 projects equal to 5% of MECO and HELCO 2008 system peak load." *See* HECO Response to Blue Planet/HECO-IR-10(b) (emphasis added).

Finally, immediate FIT implementation by HELCO and MECO without further delay is consistent with the timing of the FIT contemplated by the Energy Agreement[5] and procedural orders in this proceeding. The Energy Agreement includes a commitment by the HECO Companies to implement the FIT to "dramatically accelerate the addition of renewable energy from new sources." Energy Agreement Summary of Key Agreements at 3.[6] The Energy Agreement parties request the Commission to conclude an investigative proceeding to determine the best design of a FIT by March 2009 and adopt tariffs and prices by July 2009. Energy Agreement at 17.

Accordingly, the Commission's October 28, 2008 Order Initiating Investigation directed the parties to submit to the Commission a stipulated procedural schedule that should, to the extent possible, allow the Commission to complete its deliberations and issue a decision by March 31, 2009. *Id.* at 7, 9. On January 20, 2009, the Commission issued its Order Approving the HECO Companies' Proposed Procedural Order, As Modified, which adopts a schedule with July 17, 2009 as the due date for the final identified procedural step. And on October 29, 2009, the Commission issued its Order Setting Schedule setting forth the current schedule with May

[5] "Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies" dated Oct. 20, 2008 ("Energy Agreement").

[6] *Available at* http://heco.com/vcmcontent/StaticFiles/pdf/HCEI_Summary-Final.pdf.

13, 2010 as the due date for the final procedural step. Thus, further delays are contrary to the FIT timeframe envisioned by the Energy Agreement and the Commission's procedural orders to date.

III. FORMAL NERC-EQUIVALENT RELIABILITY STANDARDS ARE NECESSARY TO PROPERLY DETERMINE THE CAPACITY OF THE HECO COMPANIES' SYSTEMS TO ACCEPT GENERATION FROM VERs.

A central question in efforts to promote renewable energy in Hawaii is the capacity of the HECO Companies' electric systems to accept generation from VERs. On March 2, 2009 – over a year ago – the Commission issued PUC-IR-1 to the HECO Companies, which states: "For each island, with the current levels of demand, transmission, and supply resources, what is the maximum amount of total and additional intermittent resources that can be accommodated without compromising reliability?" *Id.* Blue Planet submits that the Commission will not receive a satisfactory answer to this question unless and until the Commission adopts formal bulk electric system reliability standards for the HECO Companies that are equivalent to standards administered by the North American Electric Reliability Corporation ("NERC"), and such standards are used to determine the capacity of the HECO Companies' systems to accept generation from VERs.

As explained in Blue Planet's prior submissions to the Commission, there are no technical reasons barring the use of NERC-equivalent formal reliability standards for the HECO Companies' systems. Virtually all electric systems in the continental United States operate under NERC reliability standards. The HECO Companies' systems are basically the same as other United States systems operating under NERC reliability standards insofar as all systems must maintain adequate voltage, balance supply and demand in real time, and maintain system stability. The Electric Reliability Council of Texas ("ERCOT") Interconnection has no

alternating current interconnection with either the NERC Eastern Interconnection or Western Interconnection and must therefore rely solely on internal resources to balance supply and demand in real time. In that respect, it is a type of "island" system similar to the HECO Companies' systems. Yet the ERCOT Interconnection (as required by law[7]) is nonetheless planned and operated according to NERC reliability standards as implemented by the independent ERCOT.

The experience of New Zealand similarly demonstrates that formal reliability standards are appropriate and utilized not only in North America, but on isolated island electric grids similar to those in Hawaii. The electric system in New Zealand consists of two separate island grids with limited interconnection via a high voltage direct current undersea cable. The bulk power electric system is subject to formal reliability standards established by the New Zealand Electricity Commission. *See* New Zealand Electricity Commission (reliability standards).[8] These New Zealand standards are comparable to NERC reliability standards governing North America. For example, under New Zealand reliability standards, "Principal Performance Obligations," or PPOs, establish real-time reliability standards (i.e., system frequency and voltage control) the bulk electric system operator must comply with to ensure reliable operation of generation and transmission. *See* New Zealand Electricity Commission (performance obligations).[9] Similarly, grid reliability standards set forth the requirements for the design and upgrade of the high voltage transmission system; these requirements are analogous to NERC reliability standards related to transmission planning. *See* New Zealand Electricity

[7] *See* 16 U.S.C. § 824o(c)(1) (concerning development and enforcement of "reliability standards that provide for an adequate level of reliability of the bulk-power system[.]");16 U.S.C. § 824o(k) (provisions of 16 U.S.C. § 824o do not apply to Alaska or Hawaii).

[8] *Available at* http://www.electricitycommission.govt.nz/opdev/transmis/gridreliability/index.html#grs

[9] *Available at* http://www.electricitycommission.govt.nz/pdfs/rulesandregs/rules/rulespdf/partC-20Jul09.pdf

Commission (reliability standards).[10] The grid system operator is also required to submit monthly system performance reports to the Electricity Commission. The reports must summarize power system performance, including compliance with system frequency PPOs. *See* New Zealand Electricity Commission (performance reports).[11]

The HECO Companies' electric systems are not currently planned and operated according to NERC-equivalent reliability standards. The HECO Companies' informal operating practices and procedures lack the same level of formality and specificity as NERC reliability standards. For example, NERC reliability standards establish specific requirements concerning frequency and voltage. The HECO Companies have testified they do not utilize a formal reliability standard for frequency and voltage. *See, e.g.*, Transcript of April 13-17, 2009 Panel Hearing (Docket No. 2008-0273), Vol. I at 206, Lines 19-21 ("And we don't – at this time we don't have those types of reliability standards or metrics."); Vol. I at 197, lines 19-23 ("At this time for the – the HECO companies there is no standard, per se, like a plus or minus frequency deviation, or three outages per year due to variable generation. There is no – none of those types of quantifiable criteria."); *see also* Vol. I at 182, lines 7-20; Vol. I at 189, lines 19-22. As the name implies, future NERC-equivalent reliability standards for the HECO Companies are expected to establish a specific requirement for frequency and voltage.

As another example, the HECO Companies have suggested that the Commission's General Order No. 7, "Standards for Electric Utility Service in the State of Hawaii" ("General Order 7"), constitutes "reliability standards." *See, e.g.*, Reply Brief of the HECO Companies and Consumer Advocate filed June 26, 2009 at 17-18. Hawaii NERC-equivalent reliability standards, however, are expected to be substantially more detailed and

[10] *Available at* http://www.electricitycommission.govt.nz/opdev/transmis/gridreliability/index.html#grs.
[11] *Available at* http://www.systemoperator.co.nz/f1947,26087875/so-system-perf-report-dec-09.pdf.

complex compared to General Order 7, which sets forth only rudimentary requirements and which the Commission adopted in 1968 – over four decades ago – well before the current major transition to a clean energy economy.

Finally, due to the absence of formal reliability standards, the HECO Companies are at present under no requirement to publish official reports concerning compliance with standards. Reporting on compliance with formal reliability standards will allow verification and increased knowledge and understanding about reliability issues by the Commission and stakeholders. In addition, the HECO Companies' informal operating practices and procedures are not equivalent to NERC reliability standards because they have not been developed pursuant to a stakeholder-driven process overseen by an independent entity. By contrast, NERC reliability standards undergo this type of stakeholder-driven development process as would NERC-equivalent reliability standards in the proposed new docket.

IV. FORMAL RELIABILITY STANDARDS SHOULD BE DEVELOPED AND APPROVED IN AN INDEPENDENT PROCEEDING.

Given the importance of properly determining that the capacity of the HECO Companies' systems to accept generation from VERs, and the importance of making such determinations based on formal NERC-equivalent reliability standards, it is necessary and *appropriate to development of the standards in an independent proceeding, i.e., a new docket.*

A. Process.

For the process to result in an accurate determination of the HECO Companies' VERs capacity based on formal reliability standards, it must be as identical as possible to the process utilized in the development of NERC reliability standards in North America. The process used by NERC to establish and maintain bulk power reliability standards is open, transparent and utilizes significant stakeholder involvement to develop and modify the standards.

The process is subject to Federal Energy Regulatory Commission ("FERC") oversight, and standards developed pursuant to the process are subject to FERC approval. The hallmark of the NERC standard-setting process is that an entity other than the local utility manages the process and maintains an open and transparent process with substantial stakeholder participation.

B. Scope and Subject Matter.

The subject matter of the proceeding should be narrowly focused on the development of formal NERC-equivalent reliability standards for the HECO Companies which can be used to properly and accurately assess the capacity of the HECO Companies' systems to accept VERs generation. The development of such standards and the capacity determination entails complex issues and analyses. These are best addressed in an independent proceeding solely focused on these issues.

Due to their subject matter, current dockets are not appropriate vehicles for determining VERs capacity based on formal reliability standards. The Rule 14H docket (Docket No. 2010-0015), although closely related to the development of formal reliability standards, focuses on critical yet relatively discrete issues, applicable to any generation interconnected to the distribution system, which should be addressed in the dedicated proceeding. The Clean Energy Scenario Planning/Integrated Resource Planning docket (Docket No. 2008-0108) is focused on development of an energy planning framework. The current NEM docket (Docket No. 2006-0084) is narrowly focused on NEM limits. The Distributed Generation docket (Docket No. 2003-0371) has been closed. *See* Order No. 23746 dated Oct. 19, 2007. Nor is appropriate to undertake the proposed development of formal reliability standards and determination of VERs capacity in the related tariff dockets (Docket Nos. 2006-0497 and 2006-0498).

C. Participants.

Finally, given the importance of formal reliability standards to Hawaii's clean energy future and the potential substantive technical contributions by various stakeholders, it is imperative that all interested entities be permitted to seek to intervene in this proposed new docket.

V. THE HECO COMPANIES' PROPOSED WORKING GROUP IS NOT NECESSARY OR APPROPRIATE.

The HECO Companies' proposed Working Group is not necessary or appropriate for the Commission to decide the HELCO/MECO phased implementation question or to develop formal reliability standards and determine the VERs capacity of the HECO Companies' systems based on the formal reliability standards. The Working Group is discussed in the HECO RS Report, in the February 26, 2010 Letter, and in the "Proposed Conceptual Framework for Reliability Standards Working Group" attached to the February 26, 2010 Letter ("Framework").

A. Phased Implementation of the FIT for HELCO and Maui.

As explained above, Blue Planet urges the Commission, in its orders adopting the FIT tariffs, to direct HECO, HELCO and MECO to implement the FIT immediately and without delay or to direct HELCO and MECO to implement the FIT in phases based on valid reliability concerns.

The Working Group is not necessary or appropriate for the Commission reach a decision on whether phased implementation of the FIT on the HELCO and MECO systems is warranted. A Commission decision on phased implementation of the FIT is relatively narrow and discrete. Blue Planet submits that decision can be made based upon the current record. In the alternative, the Commission can direct the parties to supplement the record in a targeted manner that does not unduly delay implementation of the FIT on the HELCO and MECO

systems. In short, the decision on phased implementation can be made without essentially adding a new proceeding to this docket. There is no need to extend the proceeding by a full year simply to make the phased implementation decision.

The proposed scope of the Working Group extends well beyond a relatively narrow and discrete Commission decision on phased implementation for HELCO and MECO to include NEM, non-FIT procurement mechanisms, and distributed generation more broadly. *See, e.g.*, February 26, 2010 Letter at 4 (Working Group to include NEM project developers from Maui and Hawaii Island); *see also* Framework at 2 (Working Group objectives include acceptance of "more intermittent renewable energy on the islands via FIT, as well as via other energy development mechanisms."); ("To the extent that the existence of reliability and/or curtailment challenges of integrating more variable renewables - including FIT resources - on any of the islands served by the Companies are validated . . . .").

The mismatch between a Commission decision on phased FIT implementation and the proposed scope of the Working Group underscores the lack of necessity and appropriateness of the Working Group in this docket. Blue Planet submits that phased implementation of the FIT on the HELCO and MECO systems strikes the proper balance between the HECO Companies' reliability concerns and the objective of the FIT to dramatically increase renewable energy development in Hawaii.

B. VERs Capacity Determinations Based on NERC-Equivalent Reliability Standards.

As explained above, Blue Planet proposes a new docket solely focused on the determination of VERs capacity for each of the HECO Companies' systems upon development of NERC-equivalent reliability standards in the same proceeding. Accordingly, Blue Planet does not favor the HECO Companies' proposed Working Group. The reasons Blue Planet believes

the Working Group is not necessary or appropriate stem from the Working Group's proposed process, subject matter, and parties.

1. Process.

For the process to result in an accurate determination of the HECO Companies' VERs capacity based on formal reliability standards, it must be as identical as possible to the NERC standards-setting process: open, transparent, and conducted by an independent entity. As proposed by the HECO Companies, the Working Group is to consist of a "Working Group" and a "Technical Support Group." Framework at 3-4.

The Technical Support Group, as proposed, is inconsistent with a NERC-equivalent process to develop formal reliability standards. Critical tasks and functions of the Working Group are delegated to the Technical Support Group. The Technical Support Group is to provide recommendations to the Working Group based on study findings. Framework at 3. It is to review the scope of work and the output of technical studies. *Id.* The technical studies are to be performed by outside consultants and contractors retained by the HECO Companies. *Id.* In addition, the HECO Companies, rather than an independent entity, are to "chair" the Technical Support Group. *Id.* Although an "independent facilitator" is proposed, it is unclear whether the facilitator's authority and scope of work are equivalent to that of an independent entity overseeing a NERC reliability standards setting process. For example, it is unclear whether the facilitator is to oversee Technical Support Group meetings and activities or just those of the Working Group. It is noted that Framework and February 26, 2010 Letter do not indicate who will select the independent facilitator or describe a selection process.

The Technical Support Group's functions and interactions with the Working Group, and access to data, raise further "black box" concerns. The Framework proposes that:

> Technical Support Group members will review the results, provide feedback on findings, and recommend follow-on work. Technical Support Group members and contractors to the Technical Support Group will be required to execute non-disclosure agreements to protect the confidentiality of sensitive utility system operations data as well as any proprietary commercial data associated with renewable projects. Except for those who are specifically identified as being part of the Technical Support Group, Working Group members will be provided reasonable access to the methodologies, assumptions, and non-confidential data used in the technical studies, will be provided with regular progress updates, and will be afforded opportunities to provide comments, but will not directly oversee or conduct the studies.

Framework at 5 (emphasis added). In a stakeholder-driven process to develop formal reliability standards and determine VERs capacity, presumably all parties would have equal access to the relevant data and information, including confidential data under protective orders in the new docket and/or non-disclosure or other similar agreements.

Finally, the Framework does not propose a panel hearing. A new docket would likely include a panel hearing to allow the Commission to properly evaluate the evidence concerning proposed reliability standards and VERs capacity determinations. These decisions are critical to Hawaii's energy future and the Commission should have the ability to evaluate the evidence in a hearing, as it would in an independent proceeding.

2. Scope and subject matter.

The subject matter of the proceeding should be narrowly focused on the development of formal NERC-equivalent reliability standards for the HECO Companies which can be used to properly and accurately assess the capacity of the HECO Companies' systems to accept VERs generation. The subject matter of the proposed Working Group appears to be inconsistent with an independent proceeding focused solely on VERs capacity determinations based on formal reliability standards. The Framework identifies four objectives of the Working Group, each of which is discussed in turn.

a. Assessment of HECO RS Report.

> 1. Commission an assessment by qualified technical research and development entities of the Reliability Standards findings of the Hawaiian Electric Companies filed February 8, 2010 to the Commission, to evaluate and further refine the preliminary findings.

Id. at 2. The scope of a new docket dedicated to establishing formal reliability standards for the purpose of accurately determining the VERs capacity of the HECO Companies' systems would be expected to be broader than, and not limited to, assessment of the HECO RS Report. Rather, it would be expected to seek to establish a more comprehensive evaluation of all technical aspects of the HECO Companies' systems in an effort to ensure that the bulk electric system reliability standards provide a solid foundation for VERs capacity determinations now and in the future, as increasing amounts of VERs generation are added.

b. Potential solutions.

> 2. To the extent that the existence of reliability and/or curtailment challenges of integrating more variable renewables - including FIT resources - on any of the islands served by the Companies are validated, commission studies by qualified technical entities to identify near-term, mid-term and long-term solutions for each island and work to implement those solutions as quickly as possible.

Id. at 2. Technical solutions should be based upon and developed in conjunction with VERs capacity determinations, which in turn should be based on Commission-approved formal reliability standards. Although Blue Planet supports efforts to expeditiously identify and implement appropriate technical solutions, it is equally important to determine VERs capacity based on formal reliability standards. Such standards should be developed in an independent proceeding as soon as possible.

c. Technical and policy solutions roadmap.

> 3. Provide a technical and policy solutions roadmap to the Commission to resolve the reliability and commercial business concerns.

Id. at 2. The injection of "commercial business concerns" raises concerns about the scope of the proposed Working Group. In this regard it is also noted that the proposed facilitator is to be knowledgeable about "commercial" as well as technical issues. Framework at 3. Accurate and trustworthy VERs capacity determinations based on formal reliability standards are fundamental to ongoing efforts to increase renewable energy acquisition in Hawaii. An independent proceeding that focuses solely on completing that critical objective, and does not emphasize "commercial business concerns," will make a substantial contribution toward achieving Hawaii's renewable energy objectives.

d. Reliability standards recommendations.

> 4. Provide technical Reliability Standards recommendations to the Commission.

Id. at 2. Only a NERC-equivalent reliability standards setting process can produce Hawaii NERC-equivalent reliability standards. For the reasons discussed above, the proposed Working Group process is not consistent with a NERC-equivalent process. An independent proceeding is therefore warranted.

3. Participants.

Given the importance of formal reliability standards to Hawaii's clean energy future and the potential substantive technical contributions by various stakeholders, it is imperative that all interested entities be permitted to seek to intervene in this proposed new docket. The Framework proposes that the parties to the Working Group be limited to the FIT parties, the Public Benefits Fee administrator, a NEM developer from Hawaii Island, and a NEM

developer from Maui. Framework at 2. The Framework appears to suggest that the Commission will be requested to confer intervenor party status in the FIT docket to two new entities, the two NEM developers, without allowing other interested parties to seek to intervene in the proposed Working Group phase of the docket or requiring motions to intervene.

VI. IF THE COMMISSION PROCEEDS WITH A WORKING GROUP IN THIS DOCKET, THE FRAMEWORK SHOULD BE MODIFIED CONSISTENT WITH BLUE PLANET'S COMMENTS.

For the foregoing reasons, Blue Planet urges the Commission to initiate an independent proceeding which adopts formal NERC-equivalent reliability standards and uses those standards to determine the VERs capacity of each of the HECO Companies' systems. Should the Commission proceed with the Working Group concept as proposed by the HECO Companies, however, Blue Planet respectfully requests the Commission to modify the Working Group and Framework consistent with its above comments.

With regard to the process, Blue Planet recommends that the Working Group and Technical Support Group be combined into one group; the role and authority of the independent entity should be equivalent to that of an independent entity overseeing the development of NERC reliability standards; the independent entity should be directly retained by the Commission and report to the Commission; the independent entity should serve as Chair of the combined Working Group/Technical Support Group; and all data, information, modeling software programs, etc. should be available to all parties without exception.

With regard to the scope and subject matter, Blue Planet recommends that the subject matter should be focused on the development of reliability standards and use of these standards to make VERs capacity determinations, and that the scope should not emphasize "commercial business concerns" and in particular should exclude cost/benefit analyses of

distributed generation. Finally, with regard to the participants, all interested parties should be included in the proceeding.

VII. CONCLUSION

For all of the foregoing reasons, Blue Planet respectfully requests the Commission to (i) upon approval of the tariffs direct the HECO Companies to fully implement the FIT on the HECO system immediately and without delay, and implement the FIT on the HELCO and MECO systems either fully and immediately or in phases, (ii) conclude the FIT docket in due course and without the extending the docket for purposes of the proposed Working Group, and (iii) initiate an independent proceeding open to all stakeholders for the purpose of developing and adopting formal reliability standards and using those standards to determine the capacity of the HECO Companies systems to accept variable energy resources.

DATED: Honolulu, Hawaii, March 15, 2010.

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF HAWAII

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate the Implementation Of Feed–in Tariffs.	DOCKET NO. 2008-0273

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this date a copy of the foregoing document was duly served upon the following individuals by placing a copy of same in the United States Mail, postage prepaid, and/or by electronic service, as follows:

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